

REMARKS

Claims 1-32 are pending in this application. By this Amendment, claims 30-32 are added. Support for claim 30 is provided, for example, in Figs. 2 and 3, and support for claims 31 and 32 is provided in paragraph [0023] of the specification. No new matter is added. A Request for Continued Examination is attached. Reconsideration of the application in view of the above amendments and the following remarks is respectfully requested.

Applicants filed a November 27, 2007 Request for Reconsideration After Final Rejection (hereinafter "Request") in response to the September 27, 2007 Office Action (hereinafter "Office Action"). The Request argued for the withdrawal of the rejections of the pending claims based on a number of grounds. In response to the Request, an Advisory Action (hereinafter "Advisory Action") was mailed on December 7, 2007. The Advisory Action maintained the rejections of the pending claims and provided an attempt at rebuttal of Applicants' arguments presented in the November 27 Request. The arguments presented below reiterate arguments presented in the November 27 Request to the extent necessary for clarification. Further, the arguments presented below specifically address ongoing assertions made in the December 7 Advisory Action regarding particularly the application of Aoyama to the subject matter of the pending claims.

The Office Action rejects claims 1-7 and 10-13 under 35 U.S.C. §102(b) over U.S. Patent Application Publication No. 2003/0056440 A1 to Aoyama et al. (hereinafter "Aoyama"). For the reasons discussed below, as a supplement to Applicants' arguments presented in the November 27 Request, the rejection is respectfully traversed.

Claim 1 recites, among other features, a power system that includes a stop control module that selects a hydrogen purge mode that activates and controls a purge gas supply module to remove hydrogen from a hydrogen separation module or a hydrogen no-purge

mode that stops the purge gas supply module as a stop control mode, and executes a stop control in the stop control mode to stop a supply of hydrogen to fuel cells.

Aoyama fails to teach a power system that includes any feature that can reasonably be considered to correspond to the stop control module having the combination of all of the features positively recited in claim 1. Aoyama does not describe, expressly or inherently, the claimed stop control module. Because Aoyama fails to describe each and every element recited in claim 1, in accordance with MPEP §2131, the rejection of claim 1 as being anticipated by Aoyama should be withdrawn.

The November 27 Request argued that the Office Action fails to show that Aoyama teaches, expressly or inherently, a stop control module, as recited in claim 1. The Advisory Action is similarly deficient. In support of maintaining the rejection of claim 1 over Aoyama, the Advisory Action relies on an analysis, entirely inconsistent with Patent Office procedures, to assert that it is Applicants' burden to show that features recited in claim 1 are, in fact, not described in the applied reference. The Advisory Action first mischaracterizes the claimed stop control module as a functional feature. The Advisory Action then asserts that the Aoyama device is capable of functioning in the same manner as the mischaracterized functional feature. Based on this factually and legally flawed analysis, the Advisory Action would require that, to overcome the rejection of claim 1 over Aoyama, Applicants "prove" that Aoyama is not, in fact, capable of operating in the manner suggested in the Advisory Action. No such burden is placed on Applicants under Patent Office procedures. In other words, Applicants are not required to rebut a *prima facie* case for anticipation that has not been properly made.

The Advisory Action and the Office Action fail to meet its burden of showing that Aoyama discloses each and every element recited in claim 1, including the claimed stop

control module. Aoyama does not disclose an element that can reasonably be interpreted to correspond to the claim stop control module.

The Advisory Action maintains that there is a hydrogen line to an inlet pump that controls the operation of the hydrogen line in Aoyama, the pump being connected to a control unit. The Office Action, generally asserts that this system is connected in the same manner as that of the instant application, indicating the Examiner's conclusion that the control unit functions as the stop signal input module and stop control module. Based on this input alone, it is clear that the Advisory Action fails to give plain meaning and broadest reasonable construction to each of the claim elements. To read, for example, claim 1 in the manner suggested by the Advisory Action, would be to vitiate at least one of the positively recited claim terms. Based on this faulted conclusion, the Advisory Action states that the "Examiner's position is that since the structure of Aoyama and the instant application are the same (which they are not), then Aoyama et al. is capable of functioning in the same manner."

The Advisory Action presents a discussion of case law in asserting that "[i]t has been held that the recitation of an element is capable of performing a function is not a positive limitation but only requires the ability to so perform." It is important in the face of this assertion in the Advisory Action to recognize that Applicants are not reciting functional limitations, and are not relying on an assertion, for example, that one or more of the positively recited claim elements are "capable" of performing a function. Rather, it is the Examiner's assertion, without first establishing that the Aoyama reference presents explicitly, or inherently, features which correspond to each of the positively recited claimed features, that certain features of Aoyama may be considered to be capable of performing certain of the functions recited in the pending claims. Applicants have carefully reviewed this analysis and believe it to invert the legal precedence upon which the Advisory Action relies in support of its conclusions of anticipation.

In the last sentence of the fifth full paragraph, where it states that "[a]pplicant has not provided any proof as to how the structure of Aoyama et al. is different than that of the instant specification, and thus the previous position is upheld," appears to attempt to invoke the very narrow judicial exception to the requirement for the Patent Office to establish anticipation cited in *In re Best* in which it was established that once the Patent Office establishes that the structures of the claimed device and the prior art device are "identical" or substantially identical, the burden shifts to the Applicant to disprove functional limitations relied upon by the Applicant in attempting to distinguish over the prior art. It should be noted again here that first, the Office Action, and this Advisory Action, have not established that Aoyama discloses an identical or substantially identical device. Further, Applicants are not relying on functional limitations. But rather, Applicants recite specific structural interrelationships which are not explicitly nor impliedly taught by Aoyama. As such, the burden does not shift to the Applicants to attempt to rebut a *prima facie* case for anticipation that the Patent Office has not made.

To be clear, Aoyama discloses a hydrogen generation device having a structure that does not require a purge gas supply (paragraph [0033]). The disclosed structure that includes a recycle purge gas pump that recycles hydrogen and purge gas cannot reasonably be considered to teach, or to have suggested, any stop control module for activating and controlling in a hydrogen purge mode a purge gas supply module to remove hydrogen from a hydrogen separation module. At least this feature of the pending claims, regardless the broad interpretation that the Office Action takes in support of its conclusion that the features of the pending claims are taught by the reference, is in error. Specifically, it remains unclear how even the control unit 10 of Aoyama can reasonably be considered to activate and control in any alleged hydrogen purge mode a purge gas supply module which the Aoyama disclosure specifically indicates is not required.

For at least the foregoing reasons, and the reasons additionally provided in the Request, Aoyama cannot reasonably be considered to teach a power system having the combination of all of the features positively recited in independent claim 1. Further, claims 2-7 and 10-13 are also not taught by Aoyama for at least the respective dependence of these claims directly or indirectly on an allowable base claim as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejection of claims 1-7 and 10-13 under 35 U.S.C. §102(b) over Aoyama are respectfully requested.

The Office Action rejects claims 8, 9, 12 and 13 under 35 U.S.C. §103(a) over Aoyama; rejects claims 17-28 under 35 U.S.C. §103(a) over Aoyama in view of U.S. Patent Application Publication No. 2001/0016276 A1 to Yamanashi; rejects claims 14-16 and 29 under 35 U.S.C. §103(a) over Aoyama in view of U.S. Patent No. 6,063,515 to Epp et al. (hereinafter "Epp"). For the reasons described below, and the reasons additionally provided in the November 27 Request, the rejections are respectfully traversed.

Because neither of Yamanashi or Epp overcome the above-identified shortfalls in the application of Aoyama to at least to the combination of features positively recited in independent claim 1, claims 8, 9 and 12-29 would not have been suggested by any combination of Aoyama with Yamanashi and Epp, for at least the respective dependence of these claims directly or indirectly on an allowable base claim, as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejection of claims 8, 9 and 12-29 under 35 U.S.C. §103(a) over Aoyama in combination with the other applied references are respectfully requested.

The Office Action rejects claims 1-6, 10-13, 17, 18, 24, 27 and 28 under 35 U.S.C. §103(a) over U.S. Patent Application Publication No. 2003/0072978 A1 to Meyer et al.

(hereinafter "Meyer") in view of Epp and further in view of U.S. Patent No. 6,410,175 B1 to Tillmetz et al. (hereinafter "Tillmetz"); rejects claims 8, 9 and 26 under 35 U.S.C. §103(a) over Meyer and Epp in view of Tillmetz and further in view of Aoyama; rejects claims 1, 7, 14-16, 19, 20, 23, 25 and 29 under 35 U.S.C. §103(a) over Epp in view of Meyer; and rejects claims 21 and 22 under 35 U.S.C. §103(a) over Epp in view of Meyer and further in view of Yamanashi. For the reasons described below, and the reasons additionally provided in the Request, the rejections are respectfully traversed.

In rejecting claim 1 under 35 U.S.C. §103(a), the Office Action relies solely on the combination of Meyer and Epp. The Advisory Action clarifies that this rejection relies solely on Meyer for the teaching of the claimed stop control module.

The Office Action and the Advisory Action assert that a stop control module is inherently disclosed in Meyer because Meyer's fuel gas processing system is "capable of having a stop control module." This assertion relies on the same factually and legally flawed analysis presented with respect to the rejection of claim 1 over Aoyama, described above.

On page 3, the Advisory Action reiterates the Examiner's position regarding evidence provided in the Office Action that is reiterated in the Advisory Action "for clarity's sake." The Advisory Action then quotes the Office Action as stating "although a stop input module and stop control module is not specifically mentioned in Meyer et al.'s system, one inherently exists." This is exemplified by the fact that it talks about a shut down system and the controlling of a switch [132], valves [141, 152, 154, 156], and blowers [116B, 116C]." To take the conclusions that the Office Action, and now the Advisory Action, apparently attempt to draw to their ultimate completion, it appears as though the Advisory Action is attempting to assert that any shut down of any system that can loosely be considered to include some hydrogen module will result in purge and therefore somehow inherently anticipate the positively recited claim features. This overly broadly construes any reasonable manner by

which the standard for inherency can be applied. As explained in MPEP §706.02, a reference used under 35 U.S.C. §102 "must teach and every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present." The MPEP section states that the Patent Office must provide rationale or evidence intending to show inherency. Citing *In re Robertson* (citations omitted), MPEP §2112 states, "[i]nherency ... may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient" (emphasis added). It is well established that "[i]n relying upon the theory of inherency, the Examiner must provide a basis in fact or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art" (emphasis added). This standard is simply not met here based on the loose conclusions that because Meyer is capable of stopping, it must inherently include some stop control module that is capable of switching the system between a purge mode and a no purge mode. This loosely constructed set of conclusions simply does not meet the applicable standard.

Tillmetz is not applied in any meaningful way to the subject matter of, for example, independent claim 1, that would overcome the above-identified shortfalls in the application of the combination of Meyer and Epp to the combination of all of the features positively recited in that claim. As such, any permissible combination of Meyer, Epp and Tillmetz has not been shown to reasonably establish a *prima facie* case for obviousness of the subject matter of at least independent claim 1. Further, claims 2-6, 10-13, 17, 18, 24, 27 and 28 also would not have been suggested by this combination of applied references for at least the respective dependence of these claims directly or indirectly on an allowable base claim, as well as for the separately patentable subject matter that each of these claims recites.

Further, because neither of Aoyama or Yamanashi is applied in a manner that would overcome the shortfalls in the application of Meyer and Epp to the subject matter of

independent claim 1, none of the other attempts at rejection of the subject matter of any of the dependent claims over the combination of applied references have merit.

Accordingly, reconsideration and withdrawal of claims 1-29 under 35 U.S.C. §103(a) as being unpatentable over the varyingly-asserted combinations of applied references are respectfully requested.

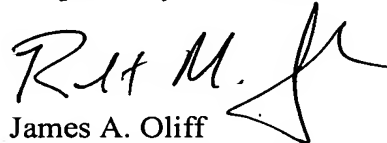
Added claim 30 recites, among other features, wherein the stop control module activates and controls (1) the hydrogen no-purge mode to close the first valve, the second valve, the third valve, the fourth valve and the fifth valve and (2) the hydrogen purge mode to close the first valve and to open the second valve, the third valve, the fourth valve, and the fifth valve. Added claims 31 and 32 recite, among other features, wherein the temperature retention module comprises, respectively, an electric heater and a combustor for combusting fuel.

The added claims are allowable over any combination of the applied references at least because of the dependence of each of these claims, directly or indirectly, from an allowable base claim, as well as the separately patentable subject matter that each of these claims recites. None of the applied references can reasonably be considered to teach or to have suggested such a combination of features.

In view of the foregoing, and additionally for the reasons provided in the Request, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-32 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachments:

Petition for Extension of Time
Request for Continued Examination

Date: January 22, 2008

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